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de Paz

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(54) **DUAL SCREEN APPLICATION VISUAL INDICATOR**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,835,090 A * 11/1998 Clark et al. 715/764
6,014,135 A 1/2000 Fernandes
(Continued)

FOREIGN PATENT DOCUMENTS

EP 1775925 4/2007

OTHER PUBLICATIONS

"Basics Guide Kyocera Echo," Sprint Corporation, Jun. 22, 2011, accessed Nov. 27, 2013 [web.archive.org/web/20110622191751/ http://support.sprint.com/support/device/Kyocera/Kyocera_ Echotrade-dvc4820001prd] 161 pages.
(Continued)

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(57) **ABSTRACT**

A dual-screen user device and methods for revealing a combination of desktops on single and multiple screens are disclosed. A determined number of desktops and/or running applications can be selectively displayed on dual screen displays conditioned upon inputs received and the state of the device. Desktop displays and applications can be selectively shifted between the screens by user gestures, and can be moved off of the screens by other user gestures and therefore hidden. The hidden desktops and screens however can be re-displayed by yet another gesture. The desktops and applications are arranged in a window stack that represents a logical order of the desktops and applications allowing a user with an intuitive ability to manage multiple applications/ desktops running simultaneously. Visual indicators can be used on the displayed applications and desktops enabling a user to maximize a display on multiple screens or to minimize them on a single selected screen.

14 Claims, 25 Drawing Sheets